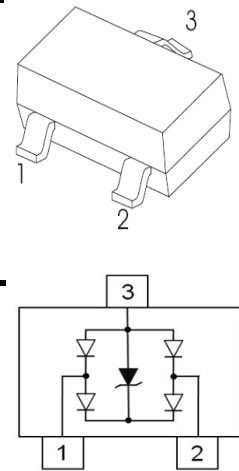


SOT-23 Plastic-Encapsulate TVS/ESD Protection Diodes

DESCRIPTION

- ◆ Peak Power Dissipation : 56W (8/20 μ s)
- ◆ Transient protection for high speed data lines
- ◆ IEC61000-4-2 (ESD) ± 15 kV (air), ± 8 kV (contact)
- ◆ IEC61000-4-4 (EFT) 40A (5/50ns)
Cable Discharge Event (CDE)
- ◆ Small package (2.9mm $\times$ 2.4mm $\times$ 1.0mm)
- ◆ Protect two data lines
- ◆ Low clamping voltage
- ◆ Low Capacitance :0.2pF Typical (I/O - I/O)
- ◆ Low leakage current

Circuit Diagram



Applications

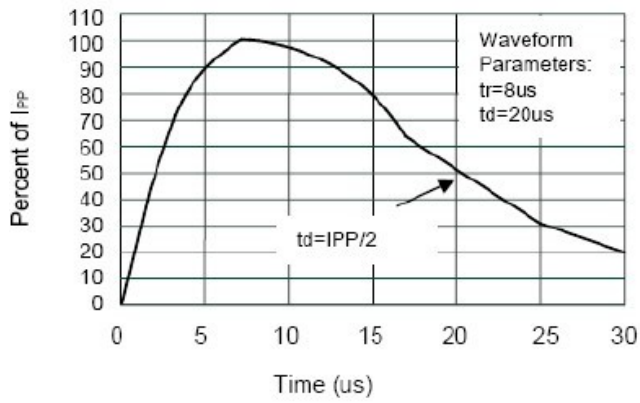
Parameter	Symbol	Value	Unit
Peak Pulse Power(8/20us)	P _{PP}	56	W
ESD per IEC 61000-4-2 (Air)	V _{ESD}	± 20	KV
ESD per IEC 61000-4-2 (Contact)		± 20	
Operating Temperature	T _{OPT}	-55 to +125	°C
Storage Temperature	T _{STG}	-55 to +150	°C
Lead Solder Temperature – Maximum (10 Second Duration)	T _L	260(10 sec.)	°C

Electrical Characteristics (T_A=25°C unless otherwise specified)

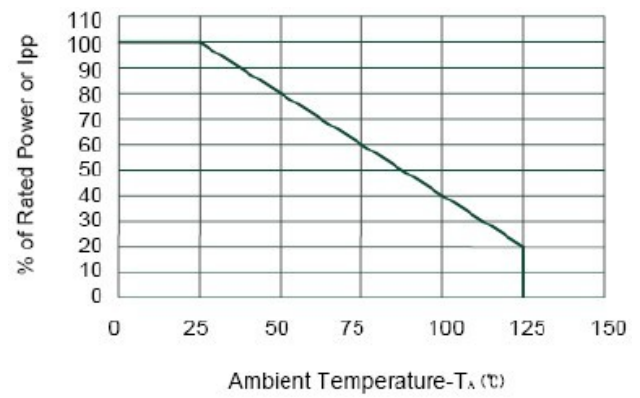
Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V _{RWM}	Reverse Working Voltage	I/O to GND			3.3	V
V _{BR}	Reverse Breakdown Voltage	I _T = 1mA Between I/O and GND	4.2			V
I _R	Reverse Leakage Current	V _{RWM} = 3.3V Between I/O and GND			100	nA
V _C	Clamping Voltage	I _{PP} = 1A, t _p = 8/20μs Between I/O and GND			10	V
		I _{PP} = 4A, t _p = 8/20μs Between I/O and GND			14	V
V _F	Forward Voltage	I _T = 10mA Between I/O and GND			1.2	V
C _T	Total Capacitance	V _R = 0V, f = 1MHz Between I/O and GND		0.4		pF
		V _R = 0V, f = 1MHz Between I/O and I/O		0.2		pF

The above data are for reference only.

ELECTRICAL CHARACTERISTICS CURVE



Pulse Waveform



Power Derating Curve

The curve above is for reference only.